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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,990	10/04/2001	Stephen William Edge	2001P14495US	4570

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EXAMINER	
TIEU, BINH KIEN	
ART UNIT	**PAPER NUMBER**
2643	9

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/971,990	EDGE ET AL.	
	Examiner	Art Unit	
	BINH K. TIEU	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8, 14-21 and 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Hall et al. (U.S. Pat. #: 6,208,871).

Regarding claim 1, Hall et al. ("Hall") teaches a method for updating timing information in a wireless communication network, comprising:

detecting, at a mobile unit, signal data containing accurate timing information, wherein said mobile unit is in an area serviced by a base station (col.5, line 40 – col.6, line 23);

deriving accurate timing information from said signal data (i.e., deriving time offset of the first and second base stations from a neighbor list of PN short code time offsets; col.5, lines 52-61 and col.6, lines 11-21);

generating association data associating said accurate timing information with base station timing information maintained by said base station (col.6, lines 25-37); and

updating network timing information for said base station using said associated data (col.6, lines 38-53).

Regarding claim 2, note col.6, lines 54-59 and col.7, line 66 - col.8, line 3.

Regarding claims 3-4, note col.10, line 63 - col.11, line 7.

Regarding claims 5-6, note col.4, lines 46-60.

Regarding claim 7, note time shifted PN short code and reference oscillating frequency represented as GPS data is received and decoded by said random mobile station 103 in col.5, lines 44-52.

Regarding claim 8, note a fixed location monitoring mobile (FLMM), as shown in figure 5, operates a central network authority (col.7, line 66 - col.8, line 6). Said FLMM derives GPS timing information from said GPS signal data (col.8, lines 7-39).

Regarding claims 14-15, note col.5, lines 29-33.

Regarding claim 16, it should be understood that upon the second base station was updated, the flow chart of the method in figure 3 (col.5, line 26 - col.6, line 59) is repeated so that a portion of said network timing information is forwarded to other mobile units including second mobile unit, third mobile unit, etc.

Regarding claim 17, Hall teaches a network timing system, as shown in figures 2 and 5, comprising:

a receiver at a mobile unit configured to detect signal data containing accurate timing information, wherein said mobile unit is in an area serviced by a base station (col.5, line 40 - col.6, line 23);

a processing device (i.e., a controller in random mobile station or FLMM controller 506 in figure 5) configured to derive accurate timing information from said signal data (i.e.,

deriving time offset of the first and second base stations from a neighbor list of PN short code time offsets; col.5, lines 52-61; col.6, lines 11-21 and col.10, lines 19-37);

a central network authority (i.e., fixed location monitor mobile), coupled to receive said accurate timing information and configured to generate association data associating said accurate timing information with base station timing information maintained by said base station and to provide said accurate timing information and association data to said base station to provide updated network timing information for said base station (col.6, lines 25-53).

Regarding claim 18, note col.5, lines 12-25.

Regarding claims 19 and 23, note the controller in random mobile station or the FLMM controller 506 in figure 5; col.5, lines 52-61; col.6, lines 11-21 and col.10, lines 19-37.

Regarding claim 20, note figure 1; col.10, line 63 – col.11, line 7.

Regarding claims 21 and 24, note col.11, lines 8-52.

Regarding claim 25, Hall teaches a network timing method in a network including a central network authority and a plurality of areas each serviced by at least one base station, as shown in figures 3 and 5, comprising:

detecting, at a mobile unit, GPS signal data (col.5, line 40 – col.6, line 23);

deriving, at one of said mobile unit and said central network authority, GPS timing information from said GPS signal data (i.e., deriving time offset of the first and second base stations from a neighbor list of PN short code time offsets from one of a controller in random mobile station and FLMM controller 506 in figure 5; col.5, lines 52-61 and col.6, lines 11-21);

associating said GPS timing information with base station timing information from by said base station in said area (col.6, lines 25-37); and

updating network timing information for said base station using said GPS timing information and said base station timing information (col.6, lines 38-53).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 9–13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall et al. (U.S. Pat. #: 6,208,871) in view of Agashe et al. (U.S. Pat. #: 6,430,415).

Regarding claims 9-11, Hall teaches all subject matter as claimed above. Hall further teaches the step of identifying the base station time at which said GPS signal data is detected (i.e., identifying first and second PN short code time offsets from the first and second base stations, col.5, lines 44-56 and col.6, lines 4-23). It should be noticed that Hall fails to clearly teach the steps of forwarding said base station time along with said GPS signal data to said central network authority; and generating said association data at said central network authority. However, Agashe et al. ("Agashe") teaches such features included the remote station operable as mobile unit forwarding GPS data such as range measurements to the WPF 18 operable as the central network authority in col.10, lines 21-29 for a purpose of synchronizing the remote station timing and deriving a location of said remote station.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of said steps of forwarding said base station time along with said GPS signal data to said central network authority; and generating said association data at said central network authority, as taught by Agashe, into view of Hall in order to synchronize the timings among remote stations, base station and the central network authority.

Regarding claims 12-13, Agashe further teaches limitations of the claims in col.4, line 62 – col.5, line 5 and col.9, lines 14-30.

Regarding claim 22, Agashe further teaches limitations of the claims in col.10, lines 21-29.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goldberg (U.S. Pat. #: 6,061,573) teaches a method and apparatus in a radio communication system for synchronizing transmissions comprising a controller, operable as a central network authority, has coordinated time reference to control synchronization timings of base stations.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (703) 305-3963 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (703) 305-4708 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES**.

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BINH TIEU
PRIMARY EXAMINER

Art Unit 2643

Date: June 22, 2004